USPTO PATENT FULL-TEXT AND IMAGE DATABASE

| Home | Quick | Advanced | Pat Num | Help |

Bottom

View Cart | Add to Cart

Images
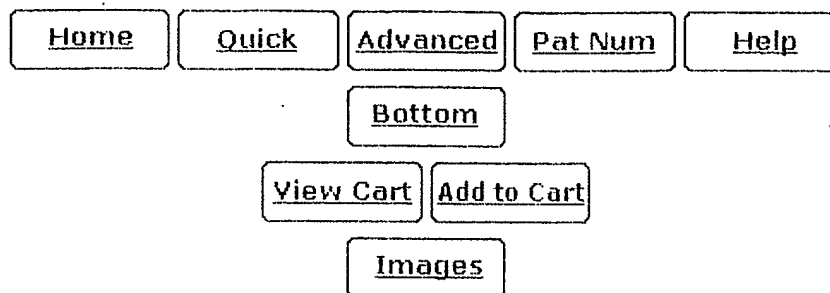
(1 of 1)

| **United States Patent** | **6,915,351** |
| **Tahan** | **July 5, 2005** |

Community separation control in a closed multi-community node

Abstract

A method and mechanism of enforcing, in a computer network, a community separation policy wherein the data of a particular user community should be accessible only by members of that community. A Multi-Community Node (MCN) processes information for users in multiple communities and must enforce the community separation policy. In a closed MCN, which runs only applications trusted to enforce the community separation policy, the method and mechanism performs a set of checks on packets received from and to be transmitted on a network, to ensure that all communications comply with the community separation policy. The checks (1) prevent communications from a network used by one community or communities to a network used by different communities; (2) ensure that packets sent by the MCN are output on an interface attached to a network for the intended community; and (3) detect when remote nodes communicating with the MCN spoof their source network address to masquerade as a node in another community. The enforcement method and mechanism use a database of associations of sets of communities corresponding to each network addresses of the MCN and each node with which it communicates, and of the set of communities associated with each network attached to the MCN.

Inventors: **Tahan; Thomas E.** (La Jolla, CA)
Assignee: **Sun Microsystems, Inc.** (Santa Clara, CA)
Appl. No.: **740100**
Filed: **December 18, 2000**

Current U.S. Class:	**709/242** ; 370/389; 370/392; 370/395.31; 370/400; 709/225; 709/249
Current International Class:	H04L 29/06 (20060101)
Field of Search:	709/224,225,240,242,249,227 370/355,389,392,400,395.31 713/201

References Cited [Referenced By]